

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

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LAMBETH MAGNETIC STRUCTURES,  
LLC,

Plaintiff,

v.

SEAGATE TECHNOLOGY (US) HOLDINGS,  
INC., and SEAGATE TECHNOLOGY LLC,

Defendants.

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Civ. No. 2:16-cv-00538-CB

**REDACTED**

**DEFENDANT SEAGATE'S BRIEF IN SUPPORT OF  
MOTION FOR SUMMARY JUDGMENT**

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## INTRODUCTION

Seagate moves for summary judgment of (1) invalidity based on lack of written description, (2) non-infringement based on failure of proof of multiple claim limitations, and (3) no pre-suit damages based on failure to comply with 35 U.S.C. § 287(a).

The asserted patent—U.S. Pat. No. 7,128,988 (“’988 patent”)—is invalid because Plaintiff Lambeth Magnetic Structures (“LMS”) claims the patent covers an invention that Dr. David Lambeth did not invent and that is not described in the patent’s specification. The ’988 patent describes a type of magnetic structure (a “uniaxial symmetry broken structure”) grown on a **single crystal** template. Seagate’s write heads do not have magnetic layers grown on single crystal templates. Therefore, to try to show infringement, LMS broadly asserts that the ’988 patent’s claims cover templates with **any** number of crystals, including **polycrystalline** templates. But Dr. Lambeth never invented such an invention, [REDACTED] (SOF 97-98.)<sup>1</sup> As a result, the ’988 patent includes no testing, data, drawings, **or even a single example** of the invention on a polycrystalline template and fails to satisfy the written description requirement. Because lack of written description can be found “based solely on the language of the patent specification,” *Univ. of Rochester v. G.D. Searle*, 358 F.3d 916, 927 (Fed. Cir. 2004), summary judgment is appropriate.

Seagate also is entitled to summary judgment of non-infringement because LMS cannot “make a showing sufficient to establish the existence of an element essential” to its case. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); *Medgraph, Inc. v. Medtronic, Inc.*, 843 F.3d 942, 949 (Fed. Cir. 2016) (“[S]ummary judgment of noninfringement is proper when no reasonable factfinder could find that the accused product contains every claim limitation . . .”).

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<sup>1</sup> “SOF” cites are to the paragraph numbers of Seagate’s Concise Statement of Material Facts and “Ex.” cites are to the exhibits attached thereto.

There is a total failure of proof by LMS that Seagate's accused write heads include multiple claim limitations, as construed by the Court. First, the [REDACTED] layers in Seagate's write heads do not form a "symmetry broken structure" because (1) LMS's own data shows [REDACTED] do not "consist[] of . . . bcc-d variants of a six variant system," and (2) LMS has absolutely no evidence that such layers have "unequal volumes or unequal amounts of" the required variants. Second, the [REDACTED] in Seagate's write heads do not provide a "(111) textured hexagonal atomic template" because LMS has no (1) evidence of (111) crystals in [REDACTED] let alone (2) evidence that such layers are "predominately (111) hexagonal."

Finally, LMS is barred from recovering pre-suit damages because LMS failed to plead and cannot show compliance with 35 U.S.C. § 287(a), when millions of products were sold in the United States under a license to the '988 patent without any patent marking.

#### **ASSERTED CLAIMS AND ACCUSED LAYERS OF SEAGATE'S WRITE HEADS**

[REDACTED]

[REDACTED]

[REDACTED] (SOF 51, 54.) Claim 1 is representative (color added):

A magnetic material structure comprising:  
 a substrate;  
 at least one bcc-d layer which is magnetic, forming a uniaxial  
 symmetry broken structure; and  
 at least one layer providing a (111) textured hexagonal atomic  
 template disposed between said substrate and said bcc-d layer.

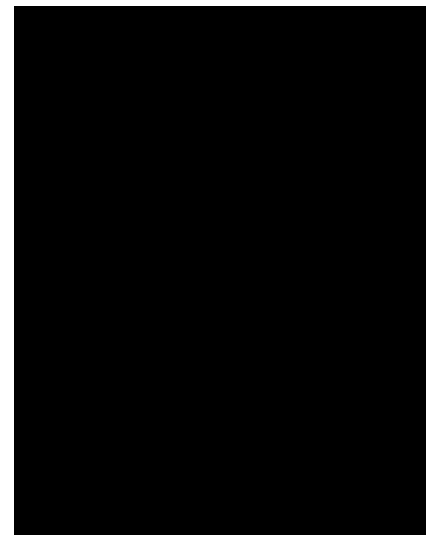
The Accused Heads contain specific layers of material: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]





### INVALIDITY

The '988 patent is invalid because it fails to meet the written description requirement of 35 U.S.C. § 112. “[T]he purpose of the written description requirement is to ‘ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor’s contribution to the field of art as described in the patent specification.’” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1353-54 (Fed. Cir. 2010) (en banc).

Compliance with the written description requirement must be shown based on the “four corners of the specification,” *Ariad*, 598 F.3d at 1351, which “must **describe** the invention in sufficient detail so that one skilled in the art can clearly conclude that the inventor invented the claimed invention,” *In re Alonso*, 545 F.3d 1015, 1019 (Fed. Cir. 2008).<sup>2</sup> A generic *ipsis verbis* recital of the claimed subject matter in the specification does not satisfy the written description requirement. *Ariad*, 598 F.3d at 1357. Rather, an inventor demonstrates possession “by such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention.” *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). Because the written description requirement “limits patent protection to those who actually perform the difficult work of ‘invention’ . . . and disclose the fruits of that effort to the public,” *Ariad*, 598 F.3d at 1353, reciting “[a] ‘mere wish or plan’ for obtaining the claimed invention is not adequate written description,” *Centocor Ortho Biotech, Inc. v. Abbott Labs.*, 636 F.3d 1341, 1348 (Fed. Cir. 2011). Further, because written description is decided based solely on the contents of the patent specification, it is properly addressed by courts at summary judgment. *See Rochester*, 358 F.3d at 927 (a patent may be held invalid for lack of written description “on its face”).

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<sup>2</sup> All emphases made in bold throughout this brief have been added unless otherwise noted.

Dr. Lambeth filed his patent application despite never having invented, possessed, or described the invention LMS now asserts: a “uniaxial symmetry broken structure” grown on a **polycrystalline** template. Polycrystalline templates are fundamentally different from the **single crystal** templates that Dr. Lambeth worked with and described in the patent. (SOF 74-80, 85-90, 95-98.) [REDACTED]

[REDACTED] Accordingly, the '988 patent specification contains no written description—no testing, no calculations, no data, no drawings, not even a single example—of a uniaxial symmetry broken structure grown on a polycrystalline template. *Rochester*, 358 F.3d at 929 n.9 (“[O]ne cannot describe what one has not conceived.”); *Fiers v. Revel*, 984 F.2d 1164, 1171 (Fed. Cir. 1993) (same).

Despite having no written description of a polycrystalline version of the invention in the '988 patent's specification, LMS nonetheless stretches the asserted claims to include a polycrystalline version of the invention because Seagate's Accused Heads do not have single crystal templates. (SOF 67-72.) In doing so, LMS runs head-first into a written description problem: the '988 patent claims much more than it describes. The Federal Circuit has repeatedly held that a patentee who writes broad claims to capture inventions described only hypothetically

in the specification fails the written description requirement as a matter of law. *See, e.g., Ariad*, 598 F.3d at 1357 (hypothetical description of broad claim in specification fails as a matter of law); *Centocor*, 636 F.3d at 1350-51; *Boston Scientific Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1364 (Fed. Cir. 2011).<sup>3</sup>

**I. THE '988 PATENT CLAIMS A BROAD GENUS THAT INCLUDES ALL POLYCRYSTALLINE TEMPLATES, AND THEREFORE MUST DESCRIBE THE FULL SCOPE OF THAT GENUS.**

The '988 patent broadly claims a “uniaxial symmetry broken structure” grown on **any** “(111) textured hexagonal atomic template.” The “(111) textured hexagonal atomic template” can be single crystal or polycrystalline. (SOF 67-68.) A single crystal template has a single crystal, whereas a polycrystalline template can have two, a hundred, or a million different randomly-oriented crystals. (SOF 6-11.) The '988 patent claims all of these templates.

Because the '988 patent claims a broad genus—a uniaxial symmetry broken structure grown on a template with any number of crystals—the specification must “show that one has truly invented the genus, *i.e.*, that one has conceived and described sufficient representative species encompassing the breadth of the genus.” *AbbVie Deutschland GmbH v. Janssen Biotech, Inc.*, 759 F.3d 1285, 1300 (Fed. Cir. 2014). “Otherwise, one has only a research plan, leaving it to others to explore the unknown contours of the claimed genus.” *Id.*

In addition, “the level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology.” *Ariad*, 598 F.3d at 1349. Broad claims in a complex and unpredictable field require a greater level of detail in order to convey possession. *See id.* at 1354; *Boston Sci.*, 647 F.3d at 1365. [REDACTED]

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<sup>3</sup> For similar reasons, the '988 patent is invalid for lack of enablement. (Ex. 14, Ross 5/2/18 Rpt. ¶¶ 244-366.) Given space limitations, however, Seagate moves for summary judgment only on written description.

[REDACTED]

[REDACTED]

[REDACTED]

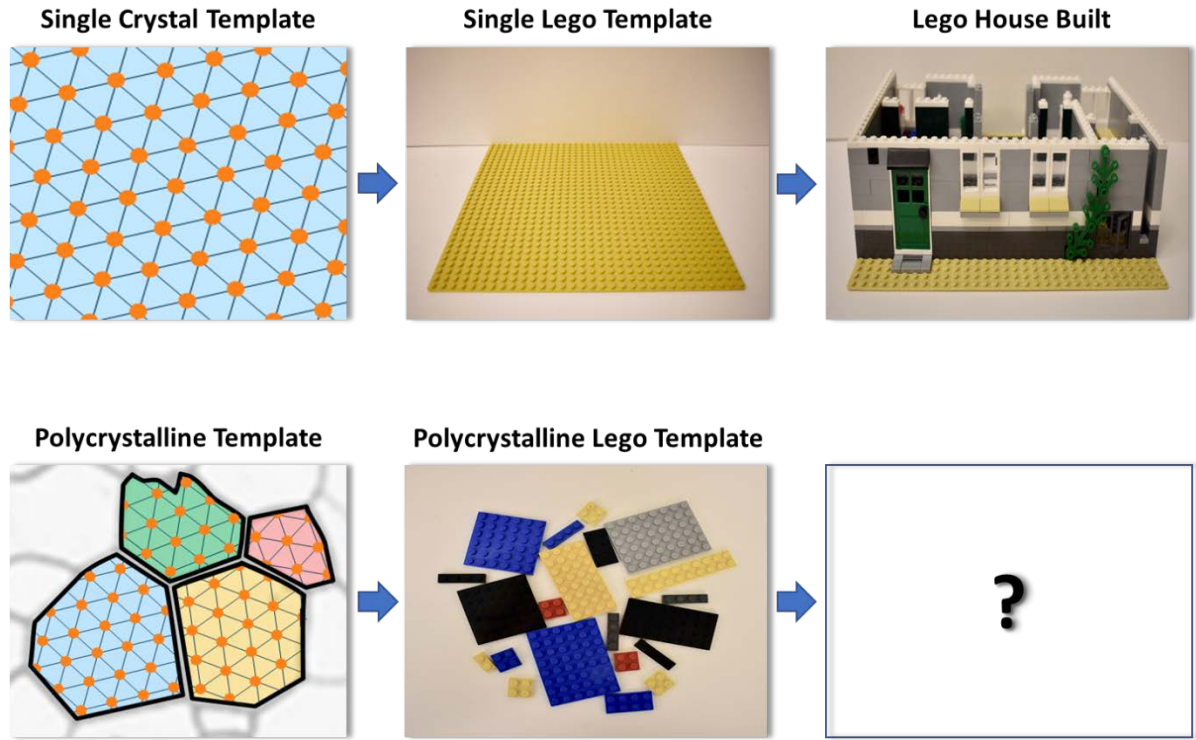
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The huge gap between forming a uniaxial symmetry broken structure on a single crystal template versus a polycrystalline template can be analogized at a high level to building a house on two different Lego “templates,” as shown below:



Much like with the Lego templates depicted above, the “(111) textured hexagonal atomic template” provides the foundation upon which the “uniaxial symmetry broken structure” (the house) is grown. Indeed, the Court construed “atomic template” to mean “an atomic pattern

upon which material is grown and which is used to **direct the growth of an overlying layer.**"

(Dkt. 78 at 8.) The '988 patent describes how a single crystal template directs the growth of an overlying magnetic layer to achieve uniaxial anisotropy, but does not describe how a polycrystalline template would do so. (SOF 85-94.) Hence the Lego analogy: describing a house built on a "single lego template" is not the same as describing a house built on a "polycrystalline lego template," which [REDACTED]

[REDACTED] The '988 patent cannot validly claim a "uniaxial symmetry broken structure" made with a polycrystalline template when all it ever describes is an invention using a single crystal template. Describing the latter does not demonstrate possession of the former. (SOF 87-92.)

## **II. THE '988 PATENT'S SPECIFICATION DOES NOT ADEQUATELY DESCRIBE OR SHOW POSSESSION OF UNIAXIAL SYMMETRY BROKEN STRUCTURES GROWN ON POLYCRYSTALLINE TEMPLATES, AS A MATTER OF LAW.**

### **A. The '988 Patent's Specification Relates Only to Single Crystal Templates.**

[REDACTED]

[REDACTED]

[REDACTED]<sup>4</sup> It is undisputed that the examples and descriptions in the '988 patent's specification use single crystal templates; there are no working embodiments of the invention with a polycrystalline template; the mathematical equations the specification teaches for calculating uniaxial anisotropy are only for variants grown on single crystal templates; and every drawing that purports to show a working combination of variants depicts them grown on a single crystal template. (SOF 76-90.) In short, **all** of the '988 patent specification's detailed descriptions, figures, equations, calculations, and alleged working

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<sup>4</sup> For purposes of this motion only, Seagate adopts the description of a person of ordinary skill in the art described by LMS's expert, Dr. Coffey. (Ex. 21, Coffey 7/16/18 Rpt. ¶ 33.)

embodiments relate to a single crystal template. (*Id.*)

**B. The '988 Patent Only Hypothesizes—But Does Not Describe—a Uniaxial Symmetry Broken Structure Grown on a Polycrystalline Template.**

Unlike the descriptions in the '988 patent's specification for single crystal templates, there is virtually no discussion in the specification of a uniaxial symmetry broken structure grown on polycrystalline templates. (SOF 84-92.) The '988 patent only hypothetically discusses using a polycrystalline template to grow a uniaxial symmetry broken structure. After calculating variant combinations that could result in uniaxial anisotropy when grown on single crystals (Ex. 1, 18:46-21:39), the specification posits—without any calculations, examples, or figures—that the invention could hypothetically be made to work on a polycrystalline template:

[E]ven though a single crystal substrate will yield the best and most easily understood performance, having a single crystal is not a requirement to achieve [uniaxial behavior]. The requirement is only that **each group of coupled variants be selected and placed upon an appropriately rotated polycrystalline grain template so as to produce a nearly common hard magnetic axis for the entire sample. . . . The technique to obtaining the same easy and hard magnetic axis behavior across an entire polycrystalline sample is to induce the appropriate (110) textured bcc-b [sic] uniaxial variant set for each of the randomly oriented hexagonal templates.**

(Ex. 1, 21:67-22:19.)

This circular passage is not an adequate written description of the genus including polycrystalline templates. It merely states that to form a “uniaxial symmetry broken structure” on a polycrystalline template, one should select and grow the “appropriate” variants on the polycrystalline template so as to achieve uniaxial anisotropy. *See Regents of the Univ. of California v. Eli Lilly & Co.*, 119 F.3d 1559, 1568 (Fed. Cir. 1997) (“The description requirement of the patent statute requires a description of an invention, not an indication of a result that one might achieve if one made that invention.”); *Boston Scientific*, 647 F.3d at 1365 (granting summary judgment where there was no guidance in the specification “as to how to

properly identify or choose the claimed analogs”). Not once does the specification ever mention—let alone describe—what the “appropriate” variants needed for uniaxial anisotropy actually are. (SOF 94.) Here, the passage amounts to no more than “a research plan, leaving it to others to explore the unknown contours of the claimed genus.” *AbbVie*, 759 F.3d at 1300.

Rather than describe what variant sets are “appropriate” for a polycrystalline template, the '988 patent merely repeats the same conclusory suggestion later in the specification:

However, for polycrystalline substrates the epitaxially grown films contain multiple variant sets corresponding to the crystalline orientations of the individual template grains. **The appropriate set of couple variants are selected for the particular orientated polycrystalline template** via processing conditions and symmetry breaking mechanism.

(Ex. 1, 23:18-26.) Once again, this passage does not describe what the “appropriate” variant sets are for a polycrystalline template, or how such “appropriate” variant sets should be selected.

The '988 patent provides no testing, data, examples, or other disclosure to illustrate what the “appropriate” variant sets are for polycrystalline templates or what “processing conditions” and “symmetry breaking mechanisms” are needed to induce their growth. It “simply claim[s] a desired result”—a uniaxial symmetry broken structure on a polycrystalline template—“without describing [how to] achieve that result.” *Ariad*, 598 F.3d at 1349. That is nothing more than a “‘mere wish or plan’ for obtaining the claimed invention” and “is not [an] adequate written description” as a matter of law. *Centocor*, 636 F.3d at 1348.

### C. LMS's Expert Does Not Create a Genuine Issue of Fact.

A “patent can be held invalid for failure to meet the written description requirement, based solely on the language of the patent specification.” *Rochester*, 358 F.3d at 927. Given the objective deficiency of the specification, LMS cannot overcome summary judgment by offering conclusory testimony from its expert, Dr. Coffey. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *See Carnegie Mellon Univ. v. Hoffman-La Roche, Inc.*, 541 F.3d 1115, 1126-27

(Fed. Cir. 2008) (rejecting expert declarations where they did not dispute the material statements of defendant’s expert).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] But such conclusory testimony

cannot create any genuine issue of fact, because it “is devoid of any factual content upon which the jury could [rely] when considering the specification.” *Ariad*, 598 F.3d at 1357 n.8. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]—it is only what is **described in the**

**specification** that matters. “[I]t is the specification itself that must demonstrate possession,” and

“a description that merely renders the invention obvious does not satisfy the requirement.”

*Ariad*, 598 F.3d at 1352; *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1310 (Fed. Cir.

2008) (“Obviousness simply is not enough; the subject matter must be disclosed to establish possession.”).



**D. The Federal Circuit Has Repeatedly Invalidated Patents Under These Circumstances.**

This is a case where the patent **describes** only one species (a uniaxial symmetry broken structure grown on a **single** crystal template), yet attempts to **claim** a much broader genus (uniaxial symmetry broken structures grown on templates with **any number** of crystals). The Federal Circuit has repeatedly found patents invalid for inadequate written description in these circumstances. *See, e.g., Hoffmann-La Roche*, 541 F.3d at 1124-27; *Centocor*, 636 F.3d at 1349-51; *LizardTech Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1344-47 (Fed. Cir. 2005); *Ariad*, 598 F.3d at 1354-58; *Rochester*, 358 F.3d at 922-29; *AbbVie*, 759 F.3d at 1298-1302; *Regents of the Univ. of California*, 119 F.3d at 1566-69.

In *Hoffmann-La Roche*, the Federal Circuit affirmed summary judgment invalidating claims directed to genes that “broadly encompass[ed] coding sequences originating from any bacterial species.” 541 F.3d at 1124. The court held that “the narrow disclosure of the [one bacterial] gene is not representative of and fails to adequately support the entire claimed genus.” *Id.* at 1126. In *Centocor*, the Federal Circuit invalidated overbroad claims as a matter of law where the specification described a specific antibody in mice “in great detail,” yet the patent claimed the antibody in humans as well. 636 F.3d at 1349-51. In *LizardTech*, the patent described a “single” way of implementing a digital compression algorithm, yet the patent claimed all ways of implementing the compression algorithm. 424 F.3d at 1344-46. The Federal Circuit invalidated the overbroad genus claim as a matter of law because “there [was] no support for such a broad claim in the specification.” *Id.* at 1344.

As in these cases, the ’988 patent attempts to construct an exclusionary fence around a broad genus that the specification does not describe. “[M]erely drawing a fence around a perceived genus is not a description of the genus. One needs to show that one has truly invented

the genus, *i.e.*, that one has conceived and described sufficient representative species encompassing the breadth of the genus.” *AbbVie*, 759 F.3d at 1300. The ’988 patent does not satisfy this requirement. Instead, Dr. Lambeth left “it to others to explore the unknown contours of the claimed genus.” *Id.* He never possessed and did not describe in his patent application the version of his claims that he now asserts against Seagate—a uniaxial symmetry broken structure grown on a polycrystalline atomic template. Because no reasonable factfinder could find that the ’988 patent’s specification provides an adequate written description of such an invention, summary judgment of invalidity should be granted. *See Hoffmann-La Roche*, 541 F.3d at 1124-27; *Centocor*, 636 F.3d at 1349-51; *LizardTech*, 424 F.3d at 1344-47; *Ariad*, 598 F.3d at 1354-58; *Rochester*, 358 F.3d at 922-29.

### **NON-INFRINGEMENT**

Seagate is also entitled to summary judgment because LMS has failed to come forward with evidence from which a reasonable jury could conclude that it has met its burden to prove infringement. *E.g.*, *Medgraph*, 843 F.3d at 949. Seagate’s write heads do not have the layers of the claimed invention, and LMS’s own tests show the absence of multiple claim limitations.

**I. SEAGATE’S [REDACTED] ARE NOT SYMMETRY BROKEN STRUCTURES BECAUSE THEY DO NOT “CONSIST OF” “UNEQUAL VOLUMES OR UNEQUAL AMOUNTS” OF VARIANTS OF A SIX VARIANT SYSTEM.**

LMS requested and received from the Court a construction of “symmetry broken structure” that requires a structure “consisting of” unequal amounts of the bcc-d variants of a six variant system. (Dkt. 50 at 25.) [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Therefore, the accused do not form a “symmetry broken structure.”

### A. The Court’s Construction of “Symmetry Broken Structure.”

LMS proposed a construction of “symmetry broken structure” that uses “a term of art in patent law with a distinct and well-established meaning.” *Multilayer Stretch Cling Film Holdings, Inc. v. Berry Plastics Corp.*, 831 F.3d 1350, 1358 (Fed. Cir. 2016). Except for one change (the Court added “unequal volumes” to “unequal amounts”), the Court’s construction was the one proposed by LMS and accepted by Seagate: “A structure **consisting of** unequal volumes or unequal amounts of the bcc-d variants of a six variant system.” (Dkt. 78 at 8.)

The Federal Circuit has repeatedly applied a “very strong presumption” that the phrase “consisting of” means that the “claim element is ‘closed’ and therefore ‘exclude[s] any elements, steps, or ingredients not specified in the claim.’” *Multilayer Stretch*, 831 F.3d at 1358 (quoting *AFG Indus. v. Cardinal IG Co.*, 239 F.3d 1239, 1245 (Fed. Cir. 2001)). That presumptive meaning is also consistent with the intrinsic and extrinsic evidence in this case. (*E.g.*, Ex. 1, 14:48-55 (“[T]he applicant has invented a new set of six crystalline variants with special orientational relationships. By the selection and the growth of a very special exchange coupled subset of **these** six orientational variants a symmetry broken uniaxial magnetic thin film is obtained.”); [REDACTED]

The '988 patent contemplates that growing **these** six variants in unequal amounts or volumes results in uniaxial anisotropy. (SOF 117.) Nowhere does the '988 patent contemplate using any crystals that are **not** variants of a six variant system to produce uniaxial anisotropy. Just the opposite: the '988 patent disclaims the use of crystals that are not part of the six variant system, such as the three variant system of the prior art. (SOF

120; [REDACTED]

**B. The [REDACTED] Are Not Layers “Consisting of . . . BCC-D Variants of a Six Variant System.”**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *See Fujitsu Ltd. v.*

*Netgear Inc.*, 620 F.3d 1321, 1337-38 (Fed. Cir. 2010) (affirming summary judgment of non-infringement where testing data from plaintiff’s expert showed limitation was not met).

**C. The [REDACTED] Do Not Consist of “Unequal Volumes or Unequal Amounts” of Variants of the Six Variant System.**

There is also a total failure of proof by LMS that Seagate’s [REDACTED] meet the second requirement of a “symmetry broken structure”—“**unequal volumes or unequal amounts** of the bcc-d variants of a six variant system.” (Dkt. 78 at 8.) This lack of evidence is confirmed by stark admissions from LMS’s expert and provides yet another ground for summary judgment.

LMS’s failure of proof is straightforward. LMS cannot show that there is more of one of the “bcc-d variants of a six variant system” than others. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Discovery is over. LMS has no evidence that [REDACTED] have “unequal volumes or unequal amounts of the bcc-d variants of a six variant system.” Therefore, summary judgment should be granted based on LMS’s failure of proof. *Medgraph*, 843 F.3d at 949.

**II. LMS CANNOT SHOW THAT THE [REDACTED] OF THE ACCUSED HEADS ARE “PREDOMINATELY (111) HEXAGONAL” CRYSTALS.**

Under the Court’s claim construction, for a layer to provide a “(111) textured hexagonal atomic template,” the layer must be “predominately (111) hexagonal.” (Dkt. 78 at 8.) [REDACTED]

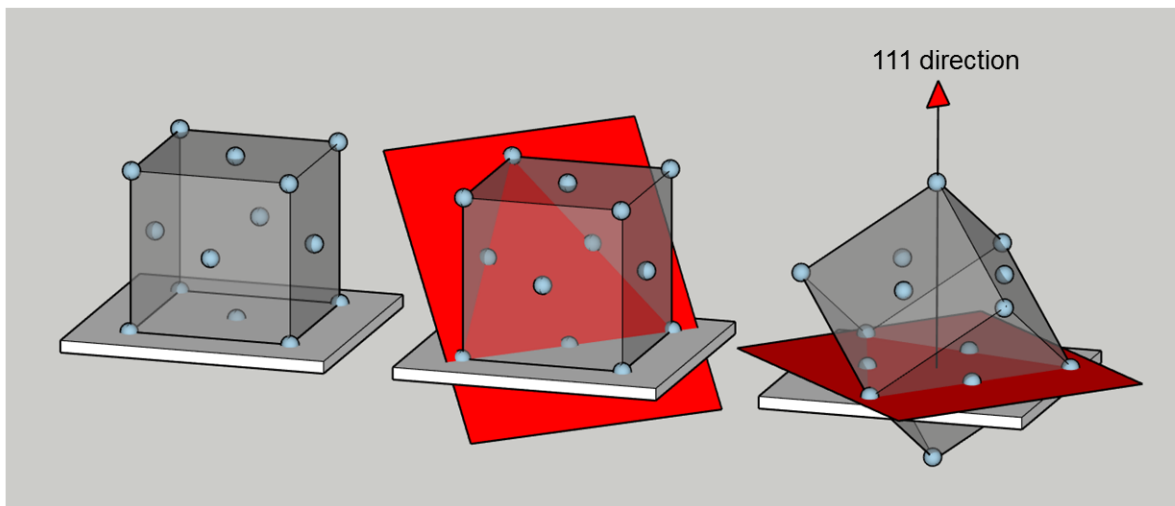
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] These elements are shown in the annotated illustration below. Depicted on the left is an fcc crystal; in the middle is the same fcc crystal with its 111 plane highlighted in red; and on the right is an fcc crystal with a (111) orientation—*i.e.*, an fcc crystal with its (111) plane (shown in red) oriented parallel to the substrate and its 111 direction perpendicular to the substrate:



fcc crystal above  
substrate

fcc crystal with  
(111) plane in red

fcc crystal with  
(111) plane parallel to  
substrate, 111 direction  
perpendicular to substrate

(SOF 22-25.) Of these three, only the right-most crystal is a (111) hexagonal crystal. (*Id.*)

#### A. LMS's Testing Fails to Show (111) Crystals.

No reasonable juror could conclude that Seagate's [REDACTED] contain "predominately (111) hexagonal" crystals because, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Thus, summary judgment of non-infringement

should be granted. *Medgraph*, 843 F.3d at 949.

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[REDACTED]

**B. LMS Cannot Show the [REDACTED] Have “Predominately (111) Hexagonal” Crystals.**

The problem gets worse for LMS. LMS also has to show that (111) crystals “predominate[]” in [REDACTED] of Seagate’s accused write heads. (Dkt. 78 at 8.) Not only has LMS failed to show the presence of (111) crystals in [REDACTED] of the Accused Heads, as explained above, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Dr. Clark's assertions are entirely conclusory and cannot create a genuine issue for trial. *D Three Enterprises, LLC v. SunModo Corp.*, 890 F.3d 1042, 1051 (Fed. Cir. 2018) ("conclusory expert assertions do not give rise to a genuine issue of material fact"); accord *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1277-78 (Fed. Cir. 2004). His assertions are conclusory because:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

---

<sup>6</sup> Dr. Clark's Reply Report contains two paragraph 14s; this citation is to the second ¶ 14.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Based on this record, no reasonable juror could conclude that Seagate's NiFe layers are "predominantly" (111) hexagonal crystals. Summary judgment of non-infringement is therefore appropriate. *Medgraph*, 843 F.3d at 949.

**PRE-SUIT DAMAGES (MARKING)**

Pre-suit damages in a patent case are "statutorily limited to those acts of infringement that occurred after the patentee gave the alleged infringer 'notice of infringement,'" either by "constructive notice, which is accomplished by marking the article with the patent number, or actual notice." *Gart v. Logitech, Inc.*, 254 F.3d 1334, 1345 (Fed. Cir. 2001). [REDACTED]

[REDACTED]

[REDACTED] LMS is therefore statutorily barred in this case from recovering pre-suit damages under 35 U.S.C. § 287. *Arctic Cat v. Bombardier Rec. Prods.*, 876 F.3d 1350, 1377 (Fed. Cir. 2017).

On December 18, 2010, the '988 patent was assigned to SBS Magnetics, a subsidiary of Acacia (collectively, "Acacia"). [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] This is a massive failure to comply with § 287(a) that requires summary judgment of no pre-suit damages.

**I. LMS FAILED TO PLEAD COMPLIANCE WITH § 287.**

The Federal Circuit recently reemphasized that the “patentee bears the burden of pleading . . . he complied with § 287’s marking requirement.” *Arctic Cat*, 876 F.3d at 1366. But in this case, LMS chose **not to plead compliance** because it knew it had a marking problem. For example, LMS’s Complaint admits that there was “a license to the ‘988 patent previously obtained by Samsung Corporation.” (Dkt. 1 ¶ 21.) [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Faced with these facts, LMS could not, and did not, plead compliance with § 287. This failure to plead compliance with § 287 **alone** bars LMS from recovering pre-suit damages and should result in summary judgment on this issue. *See Arctic Cat*, 876 F.3d at 1366; *Cognex Corp. v. Microscan Sys.*, 990 F. Supp. 2d 408, 417 (S.D.N.Y. 2013).

## II. LMS CANNOT MEET ITS BURDEN TO PROVE COMPLIANCE WITH § 287.

Not only was LMS required to plead compliance, but LMS also “bears the burden of . . . proving [it] complied with § 287(a)’s marking requirement.” *Arctic Cat*, 876 F.3d at 1366. Importantly, “[a] patentee’s licensees must also comply with § 287,” and the patentee is required to make “reasonable efforts to ensure compliance” by licensees. *Id.* A defendant bears only “an initial burden of production to articulate the products it believes are unmarked ‘patented articles’ subject to § 287.” *Id.* at 1368. “To be clear, this is a low bar.” *Id.* LMS then “bears the burden to prove the products identified do not practice the patented invention.” *Id.*

Failure to mark bars all pre-suit damages, unless the failure is cured by either marking covered products or providing actual notice to the accused infringer. *See* 35 U.S.C. § 287(a) (“no damages shall be recovered”); *Arctic Cat*, 876 F.3d at 1366 (“If a patentee . . . has not ‘given notice of his right’ by marking his articles pursuant to the marking statute, he is not entitled to damages before the date of actual notice.”); *Arctic Cat v. Bombardier Rec. Prods.*, 2018 WL 3820610, at \*7 (S.D. Fla. Aug. 10, 2018) (granting summary judgment of no pre-suit damages on remand); *see also Am. Med. Sys. v. Med. Eng’g Corp.*, 6 F.3d 1523, 1537 (Fed. Cir. 1993); *Adrea, LLC v. Barnes & Noble*, 2015 WL 4610465, at \*3 (S.D.N.Y. July 24, 2015); *Von Holdt v. A-1 Tool Corp.*, 714 F. Supp. 2d 863, 873 (N.D. Ill. 2010).<sup>7</sup>

LMS never complied with § 287(a)’s marking requirement, and thus “is not entitled to damages before the date of actual notice,” *Arctic Cat*, 876 F.3d at 1366, which in this case was the date the Complaint was filed on April 29, 2016.<sup>8</sup>

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<sup>7</sup> The marking failure **cannot** be cured by stopping sales. *E.g.*, *Arctic Cat*, 2018 WL 3820610, at \*7; *Lambda Optical Solutions v. Alcatel-Lucent USA Inc.*, 2015 WL 5470175, at \*3-5 (D. Del. July 29, 2015) (collecting cases), *adopted*, 2015 WL 5458269 (D. Del. 2015).

<sup>8</sup>



[REDACTED]

[REDACTED]

A. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

*U.S. Ethernet Innovations v. Acer, Inc.*, 2013 WL 4456161, at \*8 (N.D. Cal. Aug. 16, 2013)

(quotations omitted); *see also Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1111 (Fed. Cir. 1996)

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[REDACTED]

(§ 287 applies to “licensees . . . and other authorized parties”); *Amsted Indus. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 185 (Fed. Cir. 1994). Thus, licenses and covenants are both “properly viewed as ‘authorizations.’” *TransCore, LP v. Elec. Transaction Consultants*, 563 F.3d 1271, 1275-76 (Fed. Cir. 2009).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] LMS even pled in the Complaint that Seagate’s accused HDDs “are incorporated in Hard Disk Drive Devices that are sold in the United States . . . , including . . . **Xbox** and Playstation game consoles.” (Dkt. 1 ¶¶ 27, 30-31; SOF 305.) [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *Arctic Cat*, 876 F.3d at 1367 (patentee’s burden). More importantly, LMS is “bound by what it states in its pleadings,” *Soo Line R. v. St. Louis Southwestern Ry. Co.*, 125 F.3d 481, 483 (7th Cir. 1997), and the factual allegation in LMS’s Complaint that covered Xboxes were sold in the United States constitutes a “binding judicial admission,” *Sovereign Bank v. BJ’s Wholesale Club, Inc.*, 533 F.3d 162, 181 (3d Cir. 2008), that requires summary judgment of no pre-suit damages, *see U.S. Ethernet Innovations*, 2013 WL 4456161, at \*9 (granting summary judgment of no pre-suit damages where patentee “has

consistently taken the position that the relevant products sold by Intel infringe its patents”);

*Fortinet, Inc. v. Sophos, Inc.*, 2015 WL 6513655, at \*2 (N.D. Cal. Oct. 28, 2015).<sup>9</sup>

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] is a clear failure to ensure compliance with § 287(a). *E.g.*, *Devices for Med., Inc. v. Boehl*, 822 F.2d 1062, 1066 (Fed. Cir. 1987) (no damages where “licenses did not require its licensees to mark the [allegedly infringing] product”); *Loral Fairchild v. Victor Co. of Japan, Ltd.*, 906 F. Supp. 814, 818 (E.D.N.Y. 1995); *Jackson v. Intel Corp.*, 2009 WL 2851742, at \*6 (N.D. Ill. Aug. 31, 2009).

[REDACTED]

[REDACTED] *Arctic Cat*, 876 F.3d at 1367-68.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] LMS specifically pled

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<sup>9</sup> Nothing in this motion should be construed as an admission by Seagate that any accused HDD infringes the '988 patent. Rather, on this issue, it is LMS's burden to establish that the identified “products did not fall within the patent claims.” *Arctic Cat*, 876 F.3d at 1367.

in the Complaint in this case that there is in fact “a license to the ‘988 patent previously obtained by Samsung.” (Dkt. 1 ¶ 21.)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] LMS even filed a lawsuit in this Court asserting that TDK’s heads practice the claims of the ‘988 patent. (SOF 287-92.)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *Arctic Cat*, 876 F.3d at 1367-68 (patentee’s burden), [REDACTED]

[REDACTED] *U.S. Ethernet Innovations*, 2013 WL 4456161, at \*9.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] This is a clear failure to ensure compliance with § 287(a). *E.g.*, *Devices for Med.*, 822 F.2d at 1066. [REDACTED]

[REDACTED] LMS cannot recover pre-suit damages.

**III. RULE 37(C) PRECLUDES LMS FROM TRYING TO PROVE COMPLIANCE WITH § 287.**

**A. LMS Cannot Supply Evidence At All in Response to this Motion.**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Therefore, Rule 37(c) bars LMS from “supply[ing] evidence” in response to this motion. *Carnegie Mellon Univ. v. Marvell Tech.*, 906 F. Supp. 2d 388, 412-13 (W.D. Pa. 2012) (excluding “any evidence of CMU’s compliance with § 287 . . . under Rule 37(c)(1)”).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *Carnegie Mellon*, 906 F. Supp. 2d at 412-13.

Moreover, such a position is frivolous and cannot raise a genuine dispute of material fact. Most importantly, LMS pled in the Complaint that there is in fact “**a license to the ‘988 patent previously obtained by Samsung.**” (Dkt. 1 ¶ 21.) This is a “binding judicial admission” that LMS cannot contradict. *Sovereign Bank*, 533 F.3d at 181; *Judon v. Travelers Prop. Cas. Co.*, 773 F.3d 495, 505 (3d Cir. 2014). [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### CONCLUSION

For the above reasons, the Court should grant summary judgment of invalidity, non-infringement, and no presuit damages.

Dated: October 11, 2018

s/ Calvin L. Litsey

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